Summary of New 303(d) Listings, Delistings, and Other Significant Assessments Proposed With Oregon's 2012 Integrated Report

Proposed new Category 5 303(d) listings

With the draft 2012 Integrated Report, DEQ is proposing to add 136 water segments to the list of Category 5 Water Quality Limited Waters Needing a TMDL (303d). With these additions, the total 2012 list of Category 5: 303(d) waters will be 1,906. The new 303(d) listings include the following:

1. New biocriteria listings

For Oregon's 2010 Integrated Report, DEQ developed a methodology to apply the narrative biological criteria to evaluate macroinvertebrate data to assess the quality of aquatic life in Oregon streams. DEQ initially assigned waters found to have impaired biological conditions into an insufficient data category as "Category 3C: Impairing pollutant unknown". EPA disapproved this approach and added 317 waters with impaired biological conditions to Oregon's 2010 303(d) list.

DEQ is now modifying the status for the other **26** waters that were found in 2010 to be impaired for biological conditions to "Category 5: Water quality limited, 303(d) list, TMDL needed".

2. New Listings for dissolved oxygen

For the 2012 Integrated Report, DEQ evaluated data for dissolved oxygen from waters in the Willamette Basin (HUC 170900) and the Umatilla Subbasin (HUC 17070103). Based on this evaluation, DEQ is proposing to **add 28** waters as "Category 5: Water quality limited, 303(d) list, TMDL needed". Six of these new listings are modifying the status from previous assessments, and 22 of the listings have not been assessed previously.

3. New Listings for mercury

For the 2012 Integrated Report, DEQ reviewed information from recent Oregon Health Advisory fish consumption advisories due to mercury levels found in fish. Based on new advisories, DEQ is proposing to **add 3** waters as "Category 5: Water quality limited, 303(d) list, TMDL needed".

Oregon's human health criteria approved in 2011 include a water quality standard based on fish tissue concentrations of methylmercury. For the 2012 Integrated Report, DEQ evaluated data from fish tissue samples collected at several locations throughout the state. A protocol was developed to evaluate fish tissue sampling results and apply the methylmercury criterion. The protocol approximated methylmercury concentrations from the geometric mean of total mercury fish tissue concentrations. Based on this evaluation, DEQ is proposing to **add 11** waters as "Category 5: Water quality limited, 303(d) list, TMDL needed".

4. New Listings for other toxic substances

For the 2012 Integrated Report, DEQ evaluated data for several toxic substances from the Willamette Basin (HUC 170900) and the Umatilla Subbasin (HUC 17070103) and a few other locations around the state. DEQ applied water quality standards that had been approved by EPA at the time the 2012 data evaluation was initiated. Those applicable water quality criteria for toxic substances include criteria from OAR Table 20 for aquatic life and OAR Table 40 for human health. Based on this evaluation, DEQ is proposing to **add 82** waters as "Category 5: Water quality limited, 303(d) list, TMDL needed". Included are new listings for ammonia, arsenic, chromium, copper, DDE, dieldrin, endosulfan, endrin aldehyde, iron, lead, silver, tetrachloroethylene, thallium, and zinc.

Proposed segment changes to 303(d) listings

DEQ is modifying the segments for 19 Category 5: 303(d) listings. Most of the segment modifications are to reconcile or correct differences in segment mapping information for 303(d) listings added by EPA in 2010, to correct older listings predating DEQ's use of GIS information, or to correct stream or station locations. In the case of the Long Tom River, the segment modification is done to reflect application of dissolved oxygen spawning criteria only where salmonids (trout) fish use is designated (not where designated cool water). In the case of the Columbia River listing for PCBs, the modification reflects current fish consumption advisory location information. Additional explanation for the modifications is provided in the assessment database report.

Action	Record ID	Stream Lake Name	LLID Stream Lake	Miles	Pollutant	Season
Segment modification	24611	Amazon Creek	1232651442279	0 to 12.2	Dissolved Oxygen	Year Round (Non-spawning)
Segment location correction	24834	Boulder Creek	1244974429131	2.1 to 5.8	Dissolved Oxygen	October 15 - May 15
Segment location correction	23923	Bull Run Creek	1184252448079	0 to 9.3	Biological Criteria	Year Round
Segment modification	24503	Clackamas River	1226050453723	0 to 8.1	Dissolved Oxygen	October 15 - May 15
Segment modification	9284	Columbia River	1240483462464	142 to 287.1	PCBs	Year Round
Use clarification, segment modified	12139	Glenn Creek	1230650449903	0 to 4.1	Dissolved Oxygen	Year Round (Non-spawning)
Use clarification, segment modified	24506	Johnson Creek	1226465454422	0 to 10.5	Dissolved Oxygen	October 15 - May 15

Action	Record ID	Stream Lake Name	LLID Stream Lake	Miles	Pollutant	Season
Segment modification	24597	Long Tom River	1232400443847	31.8 to 57.3	Dissolved Oxygen	January 1 - May 15
Segment location correction	24504	North Fork Little Butte Creek/Fish Lake	1226154424196/ 1223333423868	15.6 to 17.8	Chlorophyll a	Summer
Segment modification	24563	North Santiam River	1230064446868	0 to 45.3	Dissolved Oxygen	September 1 - June 15
Segment location correction	24733	Pacific Ocean	1240637462558	19.2 to 21.5	Fecal Coliform	Year Round
Use clarification, segment modified	24584	Panther Creek	1231806452443	7.6 to 14	Dissolved Oxygen	Year Round (Non-spawning)
Segment location correction	24348	Powder River/Mason Reservoir (Phillips Lake)	1170508447455/ 1180512446816	130 to 138.2	Dissolved Oxygen	Year Round (Non-spawning)
Use clarification, segment modified	6174	Salt Creek	1232202451614	0 to 32.8	Dissolved Oxygen	Year Round (Non-spawning)
Segment modification	24502	Sieben Drainage Ditch	1225222454131	0 to 1.8	Dissolved Oxygen	January 1 - May 15
Segment location correction	47	Snake River	1190296461886	281.1 to 404	Mercury	Year Round
Segment location correction	76	Snake River	1190296461886	268.8 to 281.1	Mercury	Year Round
Segment location correction	26015	Unnamed Stream	1239657449874	0 to 1.8	Biological Criteria	Year Round
Segment location correction	24598	West Drew Creek	1232410441579	0 to 3.4	Nitrates	Year Round

Proposed delistings with the 2012 Integrated Report

With the draft 2012 Integrated Report, DEQ is proposing to **delist 71** waters that were previously listed as "Category 5: Water quality limited, 303(d) list, TMDL needed". The reasons for these delistings are to: correct listing errors, recognize approved TMDLs, apply current standards and/or beneficial use information, and evaluate data using current standards and criteria.

1. Delisting – Other pollution controls in place

DEQ is proposing to delist the Willamette River in the vicinity of the McCormick & Baxter Superfund Site (River mile 0 to 24.8) for pentachlorophenol. The listing was based on an Oregon Health Division advisory issued July 2, 1991 that advised against harvesting crayfish in the vicinity in the site. The McCormick & Baxter site was added to the Superfund National Priority List in 1994. DEQ and EPA have completed the Superfund Remedial Investigation/Feasibility Study; issued the Record of Decision (ROD) on remedial actions for soil, groundwater, and sediment at the site; implemented and completed remedial actions in 2005; completed three Five-Year Reviews to determine whether the selected remedies at the site are protective of human health and the environment; and determined that the upland soil and inwater sediment remedies are Operational and Functional.

A December 20, 2013 DEQ Memorandum demonstrates that pollution control requirements at the McCormick & Baxter Superfund Site are sufficient to achieve water quality standards in the Willamette River sediments in the vicinity of the site, and a TMDL is not needed. Information to support the Category 4B demonstration is summarized from the most recent joint EPA/DEQ report on status and progress of Superfund remediation activities.[1]

DEQ is proposing that Record 6763 Willamette River LLID 1227618456580 River Miles 0 to 24.8 Pentachlorophenol will be delisted and moved to "Category 4b: Water Quality Limited but a TMDL is not required" because other pollution requirements will achieve water quality standards in the vicinity of the site.

2. Delistings to correct listing errors - 16

a) EPA added a listing for:

Record ID	Stream Lake Name	LLID Stream Lake	Miles	Pollutant	Season
8025	Lazy Creek	1228479423146	0 to 4.5	pH	FallWinterSpring

This incorrectly re-lists Record 8025 that was delisted in 2004 based on an approved TMDL. DEQ is proposing to correct the error by **delisting this 1 listing**. The assessment for Record 8025 reverts to the status "Category 4A: Water quality limited, TMDL approved".

[1] DEQ/EPA, 2011. Third Five-Year Review Report for McCormick & Baxter Creosoting Company Superfund Site. Oregon Department of Environmental Quality and U.S. Environmental Protection Agency, September 2011. http://www.epa.gov/region10/pdf/sites/mccormick_baxter/m&b_five_year_review_sept_2011.pdf

b) EPA added a listing for:

Record ID	Stream Lake Name	LLID Stream Lake	Miles	Pollutant	Season
20340	Tenmile Lake / Tenmile Lake	1241746435728/1241367435617	0 to 5	Chlorophyll a	Summer

This incorrectly re-lists Record 20340 that was delisted in 2010 based on an approved TMDL. DEQ is proposing to correct the error by removing **1 listing** for the record and indicating the status is "Inactive". The assessment for Record 20340 reverts to the earlier 2010 status "Category 4A: Water quality limited, TMDL approved".

c) EPA added 3 listings for waters/pollutants/seasons that were already on the 2010 303(d) list. DEQ is proposing to correct the errors by **removing 3 duplicate listing** records and indicating the status is "Inactive" and consolidating the assessment information into the existing records with status "Category 5: Water quality limited, 303(d) list, TMDL needed". These include:

Record ID	Stream Lake Name	LLID Stream Lake	Miles	Pollutant	Season
6550	Arata Creek / Blue Lake	1224573455551/1224450455535	0 to 0.9	pH	Summer
20847	Burnt River	1172299443641	0 to 77.9	Dissolved Oxygen	January 1 - May 15
21121	Hall Slough	1238740454800	0 to 2.3	Dissolved Oxygen	Year Round (Non-spawning)

d) EPA added duplicate listings for West Drew Creek using station descriptors as the name of the listed water body.

Record ID	Stream Lake Name	LLID Stream Lake	Miles	Pollutant	Season
24599	West Drew Creek upstream site at RM 1.62	1232410441579	0 to 3.4	Nitrates	Year Round

DEQ is proposing to **delist 1** of the duplicate listings (Record 24599 indicate the status is "Inactive". Assessment information is consolidated into Record 24598 with the correct water body name as West Drew Creek and status "Category 5: Water quality limited, 303(d) list, TMDL needed".

e) EPA added 5 listings for dissolved oxygen based on evaluating monitoring data. DEQ evaluated a set of monitoring data for these streams and finds the data indicate the applicable dissolved oxygen criteria for year round or spawning are met. DEQ is proposing to **delist 5** waters and update the records as status "Category 2: Attaining some criteria/uses". The records include:

Record ID	Stream Lake Name	LLID Stream Lake	Miles	Pollutant	Season
24614	Bear Creek	1232660442255	0 to 5.5	Dissolved Oxygen	Year Round (Non-spawning)

Record ID	Stream Lake Name	LLID Stream Lake	Miles	Pollutant	Season
24617	Ferguson Creek	1232672442527	0 to 3.5	Dissolved Oxygen	Year Round (Non-spawning)
24508	North Fork Silver Creek	1226643448888	0 to 10.4	Dissolved Oxygen	January 1 - May 15
24501	Rock Creek	1225134454085	1.4 to 6	Dissolved Oxygen	January 1 - May 15
24536	Silver Creek	1228414450001	0.9 to 16.2	Dissolved Oxygen	October 15 - May 15

f) DEQ is proposing to **delist 1 listing** from 2002 for manganese that used monitoring results for sediment rather than water column data. Current data were evaluated for 2012 using the current water quality criterion that is applicable in saltwater and is based on total manganese concentrations. The current data are all for dissolved manganese and no results are considered valid, so the water body is assigned a status of "Category 3: Insufficient data".

Record ID	Stream Lake Name	LLID Stream Lake	Miles	Pollutant	Season
8388	Isthmus Slough	1241999433841	0 to 10.6	Manganese	Year Round

3. Delisting waters in Tualatin Subbasin for Dissolved Oxygen spawning criteria

EPA's additions to Oregon's 2010 303d list included 11 new listings in the Tualatin Subbasin (HUC 17090010) where EPA applied Oregon's dissolved oxygen criterion for spawning (11 mg/L) to protect active spawning areas for resident trout (OAR340-041-0016(1)). DEQ's 2004 and 2010 Assessment Methodologies, as well as the 2012 Assessment Methodology, discuss where and when the dissolved oxygen spawning criterion is generally applied for resident trout species such as cutthroat trout. The general protocol implements a policy set out in a February 2, 2004 letter from DEQ to EPA Region 10 describing general assumptions about where resident trout spawning occurs when no specific information is available on resident trout spawning activities.

For Oregon's 2004 Integrated Report, additional information specific to resident cutthroat trout spawning in the Tualatin Subbasin was available to DEQ. This information was contained in the 2001 Tualatin River Subbasin TMDL (approved by EPA in August 7, 2001). In the TMDL document, habitat distribution information was used to develop a map showing cutthroat trout locations (Appendix F, page F-3 and F-4, Figure 3 http://www.deq.state.or.us/WQ/TMDLs/docs/willamettebasin/tualatin/tmdlappxf.pdf). The TMDL used information from a 1995 Oregon Department of Fish and Wildlife study (ODFW, 1995), a 1992 Oregon Department of Fish and Wildlife Fish Management Plan (ODFW, 1992), and best professional judgment of DEQ and ODFW biologists.

During the evaluation of data and response to comments for Oregon's 2004/2006 Integrated Report, DEQ asked Oregon Department of Fish and Wildlife to again review the available information to determine where cutthroat spawning was likely to occur in the Tualatin Subbasin so that the correct dissolved oxygen criteria would be applied to evaluate available monitoring data. ODFW provided DEQ a letter http://www.deq.state.or.us/wq/standards/docs/ResidentTroutLetter.pdf confirming that the combination of the

cutthroat trout spawning distribution map from the 2001 TMDL plus the salmon and steelhead spawning use designations in water quality standards for the Willamette Basin (OAR 340-041-0028(4)(a) and Figure 340B) adopted by Oregon in 2003 were adequate as a guide to determine where cutthroat trout spawning was likely to occur in the Tualatin Subbasin. DEQ used this information and did not apply the spawning criteria in the evaluation of data for the Tualatin River for the segment from River Mile 0 to 62.6 to 80.8 where resident trout spawning was not likely occurring.

DEQ is proposing a similar approach is appropriate for evaluating other waters in the Tualatin Subbasin where data were evaluated by EPA for additional 2010 303d listings, and for DEQ's 2012 Integrated Report.

Based on this analysis, the DEQ is proposing to delist the following 11 waters where beneficial use information shows that resident (cutthroat) trout spawning is not likely occurring or is occurring in a limited segment where the criteria is met:

Record ID	Stream Lake Name	LLID Stream Lake	Miles	Pollutant	Season
24532	Beaverton Creek	1228308454934	0 to 9.8	Dissolved Oxygen	January 1 - May 15
24542	Bronson Creek	1228861455195	0 to 5	Dissolved Oxygen	January 1 - May 15
24543	Bronson Creek	1228861455195	5 to 6.5	Dissolved Oxygen	January 1 - May 15
24538	Cedar Mill Creek	1228477455001	0 to 5.8	Dissolved Oxygen	January 1 - May 15
24535	Chicken Creek	1228372453885	0 to 2.7	Dissolved Oxygen	January 1 - May 15
24562	Dairy Creek	1229958455017	0 to 10.1	Dissolved Oxygen	January 1 - May 15
24552	Dawson Creek	1229329455162	0 to 4.1	Dissolved Oxygen	January 1 - May 15
24534	Johnson Creek	1228355454932	2.1 to 4	Dissolved Oxygen	January 1 - May 15
20953	McKay Creek	1230119455224	0 to 15.7	Dissolved Oxygen	January 1 - May 15
24507	Tualatin River	1226500453377	0 to 62.6	Dissolved Oxygen	January 1 - May 15
24512	Unnamed (Nyberg Creek)	1227381453844	0 to 1.3	Dissolved Oxygen	January 1 - May 15

4. Delistings for dissolved oxygen criteria

DEQ is proposing to delist the following **2 waters** where current data show the criteria for dissolved oxygen are met or the listing is updated with current criteria and season in another assessment record:

Record ID	Stream Lake Name	LLID Stream Lake	Miles	Pollutant	Season
6164	Santiam River	1231425447502	0 to 12	Dissolved Oxygen	September 15 - June 30
20969	South Yamhill River	1231445452258	0 to 41	Dissolved Oxygen	January 1 - May 15

5. Delistings with no current criteria - Manganese

Updates to Oregon's toxic substance criteria were approved by EPA in 2011. One update included withdrawing the human health criteria for manganese in freshwater. DEQ is proposing to delist the following **27 waters** that were previously listed based on the withdrawn criteria:

Record ID	Stream Lake Name	LLID Stream Lake	Miles	Pollutant	Season
15991	Arata Creek / Blue Lake	1224573455551/1224450455535	0 to 0.9	Manganese	Year Round
7701	Beaverton Creek	1229133455196	0 to 9.8	Manganese	Year Round
15918	Blue River	1223436441532	0 to 15.5	Manganese	Year Round
14149	Bridge Creek	1187359428738	0 to 3.1	Manganese	Year Round
17251	Calapooia River	1231108446399	0 to 42.8	Manganese	Year Round
9277	Columbia Slough	1226470455820	0 to 8.5	Manganese	Year Round
9279	Columbia Slough	1227713456445	0 to 9.8	Manganese	Year Round
8387	Cook Creek	1233740433975	0 to 2.9	Manganese	Year Round
15083	Lenz Creek	1215146456436	0 to 1.5	Manganese	Year Round
17614	Long Tom River	1232400443847	0 to 57.3	Manganese	Year Round
17704	Marys River	1232609445565	0 to 41.1	Manganese	Year Round
21901	Middle Creek	1235959428112	0 to 12.8	Manganese	Year Round
15123	Neal Creek	1215257456640	0 to 6	Manganese	Year Round
17310	North Yamhill River	1231445452259	0 to 32.5	Manganese	Year Round

Record ID	Stream Lake Name	LLID Stream Lake	Miles	Pollutant	Season
9275	Overstreet Drain	1111111111137	0 to 0	Manganese	Year Round
8389	Salt Creek	1232202451614	0 to 32.8	Manganese	Year Round
16176	South Columbia Slough	1226200455785	0 to 3.2	Manganese	Year Round
21894	South Fork Middle Creek	1234359428465	0 to 4.4	Manganese	Year Round
8390	Sutherlin Creek	1233769433002	0 to 16	Manganese	Year Round
16248	Tualatin River	1226500453377	0 to 80.7	Manganese	Year Round
8391	Umatilla River	1193384459144	0 to 32.1	Manganese	Year Round
9553	Unnamed (Fletcher Drain)	1171410437824	0 to 1.3	Manganese	Year Round
14207	Wildhorse Creek	1187658456785	0 to 33.2	Manganese	Year Round
7693	Willamette River	1227618456580	0 to 24.8	Manganese	Year Round
7695	Willamette River	1227618456580	119.7 to 148.8	Manganese	Year Round
16461	Willamette River	1227618456580	148.8 to 184.7	Manganese	Year Round
8392	Yamhill River	1229962452299	0 to 11.2	Manganese	Year Round

6. Delistings where data show current toxic substance criteria met

Updates to Oregon's toxic substance criteria were approved by EPA in 2011. The updates included revisions to the numeric criteria protecting human health and withdrawal of the human health criteria for iron. For the 2012 Integrated Report, DEQ evaluated data using the current criteria. DEQ is proposing to delist the following **14 waters** where data show the criteria for arsenic, beryllium, and iron are met:

Record ID	Stream Lake Name	LLID Stream Lake	Miles	Pollutant	Season
8364	Cedar Creek	1236882450950	0 to 2.3	Iron	Year Round
79	Columbia River	1240483462464	98 to 142	Arsenic	Year Round
15166	Dog River	1215670454662	0 to 10.7	Beryllium	Year Round
15360	East Fork Hood River	1216272455754	0 to 27.4	Beryllium	Year Round

Record ID	Stream Lake Name	LLID Stream Lake	Miles	Pollutant	Season
15191	Evans Creek	1215775455222	0 to 8	Beryllium	Year Round
15196	Evans Creek	1215775455222	0 to 8	Iron	Year Round
14981	Hood River	1215067457204	0 to 14.6	Beryllium	Year Round
14995	Hood River	1215067457204	0 to 14.6	Iron	Year Round
15068	Lenz Creek	1215146456436	0 to 1.5	Arsenic	Year Round
15070	Lenz Creek	1215146456436	0 to 1.5	Beryllium	Year Round
15333	Middle Fork Hood River	1216272455753	0 to 9.5	Beryllium	Year Round
15105	Neal Creek	1215257456640	0 to 11.1	Beryllium	Year Round
15119	Neal Creek	1215257456640	5.6 to 11.1	Iron	Year Round
15393	West Fork Hood River	1216335456049	0 to 14.4	Beryllium	Year Round

Proposed additions to Category 4a, Water Quality Limited, TMDL approved

EPA proposed additions to Oregon's 2010 303(d) list after evaluating water quality data, but did not list several waters because information showed that a TMDL was already approved for the pollutant and the water body. Based on EPA's data analyses showing impaired waters, DEQ is adding 54 waters to the 2012 Integrated Report as "Category 4A: Water quality limited, TMDL approved".

DEQ's assessments of data in 2012 also show water not meeting water quality standards, but TMDLs have already been completed and approved. Based on the 2012 data evaluation, DEQ is adding 26 waters to the 2012 Integrated Report as "Category 4A: Water quality limited, TMDL approved". The Tualatin Subbasin TMDLs address dissolved oxygen in 21 of these assessed waters. The Rickreall Creek TMDLs address dissolved oxygen in 2 of these assessed waters. The Willamette Basin TMDL addresses mercury in 2 of these assessed waters. The Molalla-Pudding Subbasin TMDL addresses chlorpyrifos, chromium, and Malathion in 3 of these assessed waters.

The Snake River TMDL, approved by EPA in 2004, identified impaired waters that were not on Oregon's 303(d) list, and developed TMDLs for DDD, DDE, DDT, Dieldrin, dissolved oxygen, sedimentation, and total dissolved gas to address the impairments. Based on the TMDL analysis and documentation, DEQ is adding 8 Snake River segments to the 2012 Integrated Report as "Category 4A: Water quality limited, TMDL approved".

Additional information for these 88 records including water body name, segment, pollutant, supporting data, and TMDL reference is contained in the individual records in the 2012 assessment database report.